

**STATUS OF THE CLAIMS**

1. (currently amended) A system comprising: i) an implantable temperature device, ii) a signal transreceiver, iii) a processor, ~~and~~ iv) an animal identification device attachable to a body of an animal, v) a computer readable medium comprising a database of temperature information, and vi) a remote temperature sensor, wherein said processor compares temperature information received from said implantable temperature device and said remote temperature sensor with said database of temperature information and said animal identification device receives messages from said processor and generates a signal selected from the group consisting of an auditory signal, a visual signal, and an auditory-visual signal, wherein said signal is detectable ~~by an operator at the location~~ on the outside of the body of the animal upon receipt of the message from the processor and wherein said implantable temperature device and animal identification device are configured for two-way communication with the remotely located processor.
2. (previously presented) The system of Claim 1, wherein said implantable temperature device is implantable into said animal.
3. (original) The system of Claim 1, wherein said implantable temperature device is implanted into an area of the animal selected from the group consisting of the vulva, eyelid, and ear of said animal.
4. (original) The system of Claim 3, wherein said animal is a cow.
5. (currently amended) The system of Claim 1, wherein said implantable temperature device, said signal transreceiver, said processor transmit information through RFID technology.

6. (currently amended) The system of Claim 1, wherein said processor, and said ~~animal identification device~~ transceiver communicate with a wireless protocol.
7. (original) The system of Claim 6, wherein said wireless protocol is Bluetooth.
8. (original) The system of Claim 1, wherein said implantable temperature device contains a microchip comprising a unique identification number.
9. (original) The system of Claim 1, wherein said animal identification device contains a signal device.
10. Cancelled.
11. (original) The system of Claim 1, wherein said system is used to monitor the body core temperature of a dairy cow.
12. (currently amended) A method of detecting ~~estrus~~ temperature fluctuation in an animal comprising the steps of:
  - a) providing a temperature recording system comprising:
    - i) a signal transreceiver,
    - ii) a processor,
    - iii) at least one animal containing an implantable temperature device comprising a unique identification number; said at least one animal having an animal identification device attached to said animal, wherein said animal identification device is configured to receive messages from a processor and generates a signal selected from the group consisting of an auditory signal, a visual signal, and an auditory-visual signal, wherein said signal is detectable ~~by an operator at the location~~ on the outside of the

body of the animal upon receipt of the message from the processor and wherein said implantable temperature device and animal identification device are configured for two-way communication with a remotely located processor;

iv) a remote temperature sensor; and

v) a computer readable medium comprising a database of animal, herd and ambient temperature information from said implantable temperature device and said remote temperature sensor; and;

- b) detecting body core temperature of said at least one animal with said implantable temperature device over an extended period of time;
  - c) comparing said animal's body core temperature fluctuation over said extended period of time with said database of said temperature information and ambient temperature information from said remote temperature sensor; and
  - d) identifying a particular animal having a temperature fluctuation ~~entering~~ ~~estrus~~ through transmittal of an ~~estrus~~ message from said processor to said animal identification device thereby causing said animal identification device to display a signal on the outside of the animal to facilitate identification of the animal in a herd.
13. (previously amended) The method of Claim 12, wherein said at least one animal is at least one cow.
14. Cancelled.
15. Cancelled.
16. Cancelled.
17. Cancelled.

- 18 (original) The method of Claim 12, further comprising the step of encoding said processor with said unique identification number for each animal ~~within said~~ ~~at least one animal~~.
19. (original) The method of Claim 12, further comprising the step of encoding said processor with standardized animal temperature fluctuation data ~~upon entry~~ ~~into estrus~~.
20. (cancelled)